

FIFTEEN NEW WEST INDIAN CHRYSOMELID BEETLES

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ABSTRACT—Descriptions and illustration are given for fifteen new species of chrysomelid beetles from various islands in the West Indies.

This paper deals mostly with new species from the Dominican Republic that were collected by Professor Eugenio de Jesus Marcano of the University of Santo Domingo and sent to the United States National Museum of Natural History for determination. Another of his beetles represents a species described by the writer 30 years ago from poor material and a drawing of this has been made to correct the earlier illustration. The other six new species are a miscellaneous lot from various West Indian islands.

***Chalcosicya setosella*, n. sp.**

(Fig. 1)

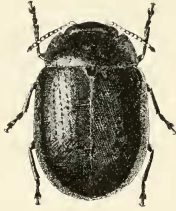
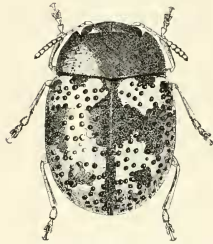
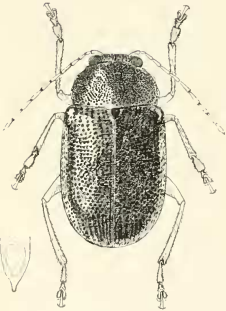
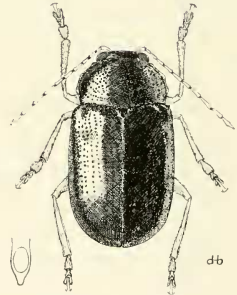
About 2.8 mm in length, oblong oval, lustrous piceous black with deep reddish brown tibiae, tarsi, and antennae; evenly covered with short, and on the elytra, erect, white pubescence; surface below this pubescence on head and pronotum finely punctate, elytra coarsely punctate, a hair from each puncture.

Head alutaceous and rather sparsely punctate with a short white hair from each puncture, a wide, depressed furrow from occiput down front, interantennal area wide and flat, labrum small. Antennae reddish brown, extending below humeri. Prothorax not twice as wide as long with arcuate sides and sinuous basal margin, smoothly rounded, only moderately convex, finely and not very densely punctate with a median smooth line, a short, pale, appressed hair from each puncture, moderately shiny although faintly alutaceous. Scutellum polished, impunctate. Elytra wider than prothorax with sharp humeri and short intrahumeral sulcus and a transverse depression below basal umbone, punctation coarse and dense and in transverse depression ridged, finer and not so coarse or dense towards apex, a short, erect, pale pubescence evenly covering but not obscuring elytral surface. Body beneath with breast and prosternum hairy but abdomen with scant pubescence, finely punctate and alutaceous; legs with pale pubescence, tibiae and tarsi reddish brown; femora toothed. Length 2.8 mm; width 1.6 mm.

Type.—Male, U.S.N.M. Type No. 70962.

Type locality.—Pico Suarte, Dominican Republic, March 27, 1964. Eugenio Marcano.

The even, short, erect pubescence over all the elytra characterizes this species. The beetle is entirely black without bronzy or greenish lustre.

1. *Chalcoscya setosella* n.sp.2. *Leucocera cyanea* n.sp.3. *Chalcoscya humeralis* n.sp.4. *Leucocera spilota* n.sp.5. *Colaspis purpurea* n.sp.6. *Oedionychus punctipennis* n.sp.7. *Colaspis amplicornis* n.sp.

***Chalcoscya humeralis*, n. sp.**
(Fig. 3)

Approximately 4.2 mm in length, ovate, shining bronze in color with scattered long, coarse, white and finer brown pubescence that on the elytra is erectish and on the pronotum more appressed and denser; surface below pubescence densely and often contiguously punctate, humeri on elytra very prominent.

Head coarsely and contiguously punctate throughout with a median depressed line from occiput down front, shining with a rosy light beneath the long white pubescence, mouthparts reddish brown. Antennae reddish brown, extending below humeri. Prothorax approximately twice as wide as long, sides only slightly curved, nearly straight, narrowed anteriorly; only moderately convex with sinuate basal margin; moderately coarsely and contiguously punctate with a bare median line and with densely appressed white hairs forming scroll-like pattern on sides. Elytra more than three times as long as prothorax with prominent humeri set off by deep intrahumeral furrow and acute, sharp curving side, considerably broader than prothorax, a depression below basal umbone; convex and at apical angle with a poorly marked costate prominence; surface shining bronzy piceous with dense and in places contiguous punctures becoming a little finer at apex and with coarse pale pubescence mixed with finer brown hairs that tend to be erectish and in somewhat of a transverse alternating pattern. Body beneath with breast and epipleura densely punctate, abdomen obsolete punctate, all covered with pale pubescence; legs with femora bronzy, tibiae and tarsi reddish. Length 4.2 mm; width 2.7 mm.

Type.—Female, U.S.N.M. Type No. 70963.

Type locality.—Los Ramones proximo Palo Alto, Stgo. en Cordillera Septentrional, 1000 meters alt. Dominican Republic, Aug. 1, 1965, Eugenio Marcano.

This is one of the largest species of *Chalcoscicya* and is conspicuous because of its prominent and sharp humeri set off by a deep intrahumeral furrow. The elytra are unusually convex, having a poorly defined lateral costa near apex, and the pubescence on the elytra is noticeable because of pale mixed with finer brown hairs.

***Colaspis purpurea*, n. sp.**

(Fig. 5)

From 5.2 to 5.5 mm in length, broadly ovate, shining deep green or bluish green, often with a purplish lustre, head sometimes entirely reddish brown but usually with green metallic lustre more or less pronounced on occiput, lower part of face reddish brown in 3 of 4 specimens. Antennae and legs reddish brown; pronotum and elytra densely and elytra coarsely punctate, head with sparse punctation.

Head wide across top but narrowed in lower part with clypeus distinctly separated, usually rather sparsely punctate with a deep median furrow from occiput gradually widening to clypeus which is somewhat depressed between antennal sockets and in type specimen much more densely punctate. Antennae pale reddish or yellowish brown, slender and extending below humeri. Prothorax approximately twice as wide as long, densely and moderately coarsely punctate except along basal margin, lustrous bluish green often with purplish lustre. Elytra fully three times as long as prothorax and not much wider but more convex, with prominent humeri; surface densely and coarsely punctate with a tendency to being striate at base, apex and along sides; somewhat costate on sides and at apex; lustrous bluish green, often with a violet tinge, in 3 of the 4 specimens. Body beneath dark brown with a greenish or purplish lustre. Length 5.2–5.5 mm; 3–3.2 mm.

Type.—Male, U.S.N.M. Type No. 70964.

Type locality.—El Cachon, Jimini, Dominican Republic, 2 Oct. 1965, E. Marconi.

Other locality.—Hatillo Palma, Dominican Republic, 16 Sept. 1964, E. Marconi.

The type specimen from Jimini is dark green without purplish lustre, but the three other specimens from Hatillo Palma have a distinct purple tinge and one is deep violet with a reddish brown head. All of them have the same head formation which is peculiar to this species—a deep, widening furrow down the front and a somewhat depressed clypeus between prominent antennal sockets. All of them have coarse dense pronotal and elytral punctation. This species is most like *Colaspis alcyonea* Suffrian and *Colaspis orientalis* Blake from Cuba in its dense punctation and in being bluish green or violet. But it differs from them both in not having the rounded first tarsal joint in the two pairs of anterior legs in the male. The tarsal joint is widened but elongate rather than rounded. The aedeagus is not like that of any other *Colaspis* in the West Indies.

***Colaspis amplicollis*, n. sp.**

(Fig. 7)

Between 4.5 and 5.2 mm in length, broadly oval, lustrous blue green occasionally with a purplish tinge and with pale yellow brown antennae and legs; prothorax with distinct but not very dense punctures, elytra also with rather sparse striate punctation.

Head coarsely and densely punctate throughout, often with faint line down front, shining green with brown mouthparts. Antennae entirely pale yellow brown, slender, extending below humeri. Prothorax nearly twice as wide as long with angulate sides and moderately coarse and rather dense punctures, entirely shining bluish green. Scutellum shining green. Elytra not much wider than prothorax and scarcely three times as long, lustrous bluish green with semi-striate punctures becoming fine at apex, but on sides coarser and with a tendency to being costate in apical half. Body beneath shining bluish green with yellowish or reddish brown legs. Length 4.5–5.2 mm; width 2.5–3 mm.

Type.—Male, U.S.N.M. Type No. 70965, and two paratypes.

Type locality.—Majaqual, Sanchez, April 12, 1965, E. Marcano.

Other localities.—Punta Gorda, Sanchez, April 11, 1965, E. Marcano.

This is a smaller species than *Colaspis smaragdula* Olivier and more of the shape of *Colaspis fervida* (Suffrian) of Cuba, but with yellowish brown instead of dark legs. The aedeagus, too, resembles that of *fervida*. There is, however, no serration on the hind leg of the male nor are the first tarsal joints of the male so rounded. The prothorax is proportionately larger than in *smaragdula* or other species of *Colaspis* from Hispaniola.

***Leucocera cyanea*, n. sp.**

(Fig. 2)

Approximately 7 mm in length, broadly ovate, moderately shining blue with a slightly greenish lustre, and pale antennae; pronotum with less than a dozen coarse punctures on each side near margin and a row along basal margin, otherwise impunctate, elytra with somewhat elongate and not densely placed striate punctures becoming indistinct near apex.

Head with widely separated, small, entire eyes, occiput and front polished, impunctate, a weakly defined median line from occiput down, lower front short, jaws large and piceous. Antennae short, pale yellowish white with the apical joint pale brown, joints nearly as broad as long, not enlarged much in apical half. Prothorax more than twice as wide as long with sides produced acutely beside eye, smooth and slightly convex, on each side near margin about 7 coarse punctures and along base a row not extending to middle. Scutellum small. Elytra smoothly convex, nearly four times as long as prothorax with elongate, well spaced, striate punctures becoming indistinct near apex and a little larger along sides. Body beneath entirely dark blue with a greenish lustre except tarsal joints which are reddish brown; claws appendiculate. Length 7 mm; width 4.7 mm.

Type.—? Female. U.S.N.M. Type No. 70966.

Type locality.—Esperanza, Dominican Republic, June 25, 1965, Eugenio Marceno.

There are at least two other dark blue species of *Leucocera*, one from Cuba, *apicornis* Chev., and the other from Puerto Rico, *laevicollis* Weise. The one from Cuba has many more punctures on the sides of the prothorax and irregularly and closely set striate punctures on the elytra. It is also of a more purplish color. *L. laevicollis* Weise from Puerto Rico has an impunctate prothorax and is of a lustrous purple color. As in so many other species of West Indian genera, these three species are very closely related, each island having its distinctive race differing in small details.

***Leucocera spilota*, n. sp.**

(Fig. 4)

Approximately 7.5 mm in length, broadly ovate, convex, somewhat shiny, pronotum finely alutaceous, head, pronotum, markings on elytra and undersurface chocolate brown, background of elytra and antennae, except tip of terminal joint, pale yellowish white, the scattered semi-striate punctures on elytra brown.

Head broad with widely separated eyes, a median faintly depressed line from occiput down front, with fine punctures on each side, a groove on inner margin of eyes and narrow line of punctures along interantennal area; jaws large, head entirely brown. Antennae extending below humeri, pale yellowish white, tip of apical joint brown, joints 8-11 broader than long and twice as broad as joints 2-5. Prothorax more than twice as broad as long with anterior angle projecting forward by eye and basal margin somewhat sinuate over scutellum; disc smoothly rounded but not very convex with finely alutaceous surface and on each side near lateral margin coarse punctures; a few finer ones scattered in middle and along

basal margin; entirely faintly shining, chocolate brown. Scutellum also brown. Elytra barely three times as long as prothorax, smoothly convex without depressions except the coarse but not dense semi-striate punctures which are in the form of conspicuously marked brown spots scattered over the shining pale yellowish white background. Other chocolate brown markings in form of an irregular spot on humerus and one in middle of base, a wide irregular band before middle extending across from margin to margin, and an irregular spot varying in size near apex, also brown sutural markings varying in width the entire length of suture. Epipleura pale yellowish white, rest of undersurface and legs shining brown, with punctures along sides and front of metasternum. Length 7.5 mm; width 6 mm.

Type.—U.S.N.M. Type No. 70967.

Type locality.—San Cristobal, Dominican Republic, Eugenio Marciano.

Other locality.—Hatillo Palma, Dominican Republic, Sept. 16, 1964, E. Marciano.

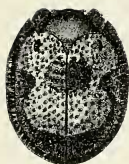
The pattern of the elytral markings is almost the same as that of 2 of the 3 specimens that I described as *Leucocera hoffmani* from Hinche, Haiti, which is in the north central part of Haiti. San Cristobal, the type locality of this species, is near the southeastern coast of the Dominican Republic, and the other specimen was from Hatillo Palma, which is in northern Dominican Republic. In 2 of the 3 specimens of *hoffmani* there are elytral bands extending from margin to margin. The third specimen is lacking both bands, having only the median basal and humeral blotches. The coloring of *hoffmani* is unlike this species in that the prothorax and background of the elytra are reddish brown with the markings an aeneous green. Even the punctures are aeneous green instead of chocolate brown. This difference in coloring is such that I believe it cannot be merely a color variety of one species. In addition, the elytra are proportionately longer in *hoffmani* being more than three times as long as the prothorax, whereas in this species the elytra in the two specimens known is scarcely 3 times as long. This coloring of chocolate brown on creamy white is unusual in the genus in which the species are mostly shining blue or green with pale yellow or red spots.

***Galernella decemvittata*, n. sp.**

(Fig. 9)

Between 3.8 and 5 mm in length, elongate oblong oval, elytra nearly 6 times as long as prothorax, head and antennae dark brown or piceous, prothorax dirty yellow brown, elytra with 10 black irregular vittae and between these 8 narrower, irregular dirty yellow brown vittae appearing somewhat costate; legs yellow with dark median rings on femora and tibiae, tarsi dark, a fine pubescence over all.

Head with interocular space half width of head, an impressed line from occiput down front which is wrinkled and alutaceous, lower front short, pale yellow brown, labrum and jaws dark brown to piceous. Antennae extending slightly below humeri, 3rd joint longest, remainder almost as broad as long, dark brown or piceous



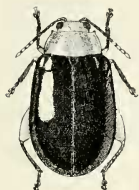
8. *Hemisphaerota quadrimaculata* n.sp.



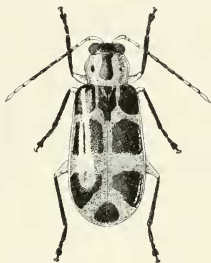
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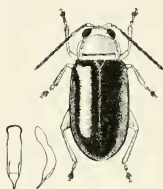
10. *Hemisphaerota bimaculata* n.sp.



11. *Oedianychus viridipennis* n.sp.



12. *Diabrotica marcanoti* n.sp.



13. *Lactica xanthopus* n.sp.



14. *Cyrthanota cyanea insulae* n.subsp.



15. *Xenochalepus cyanura* n.sp.



16. *Paratritiana rubescens* Blake

with three basal joints slightly paler. Prothorax approximately twice as broad as long with angulate sides, dirty yellow brown, often with darker shading in depressions down median line and on sides, densely and obsoletely punctate and with short, fine and appressed, pale pubescence. Scutellum large, usually brown, with short pale pubescence. Elytra wider than prothorax and usually nearly 6 times as long, with black irregular vittae composed of sutural and marginal and three others on each elytron with frequent cross bands, between these dark vittae are

narrower yellow brown vittae, often broken, and tending to be costate; surface rough with obsolete punctures and fine short pubescence. Body beneath dark brown, legs pale yellow with wide median dark areas on both femora and tibiae, tarsi mostly dark. Length 3.8–5 mm; width 1.8–2.5 mm.

Type.—Male and 25 paratypes of which 12 are in U.S.N.M., 13 in collection of Eugenio de Jesus Marcano, at Universidad Autonoma de Santo Domingo, Santo Domingo, Dominican Republic. U.S.N.M. Type No. 70968.

Type locality.—Loma de Sicajagua, Janico, Dominican Republic, July 24, 1965, E. Marcano.

This species closely resembles *Galerucella bowditchi* Blackwelder (*G. conjuncta* Blake) which I described from Port-au-Prince, Haiti. In that species there are only 8 dark vittae in consequence of which the beetles appear paler. In both species the dark vittae have the same tendency towards cross branching, but it is even more developed in the Dominican Republic species. Also the elytra are longer in most specimens. This Dominican Republic species was collected in the northern part of the island in contrast to the type locality of *bowditchi*, in southwest Haiti. Large series of both of them are at hand and the differences are consistent in all the specimens.

***Lactica xanthopus*, n. sp.**

(Fig. 13)

Between 2.8 and 3.4 mm in length, elongate oval, shining, head, prothorax, and legs pale yellow, elytra bright blue, antennae, breast and abdomen reddish brown.

Head pale yellow except for reddish brown mouthparts, smooth over occiput with a large puncture on each side near eye and a depression on front above antennal sockets, an interantennal carina that extends down front. Antennae with joints 3–5 longer than succeeding joints and becoming deeper brown towards apex. Prothorax approximately a third wider than long with only slightly curved, nearly straight sides, a well marked basal sulcus, entirely pale yellow, impunctate. Scutellum piceous. Elytra about four times as long as prothorax and except for a short intrahumeral sulcus smoothly convex, lustrous blue, sometimes faintly bluish green, impunctate. Body beneath with prosternum yellow, meso- and metasternum and abdomen reddish brown. Legs pale yellow. Length 2.8–3.4 mm; width 1.4–1.5 mm.

Type.—Male, U.S.N.M. Type No. 70970, and six paratypes.

Type locality.—Luca, Jamaica, collected on *Tunera ulmifolia* by Niilo Virkki.

Other locality.—Montego Bay, Jamaica, April 1906, VanDuzee.

Lactica xanthotrachelus Blake from Jamaica also has a yellow head and dark blue or green elytra but the legs are dark and the hind legs usually have metallic lustre. *Lactica darlingtoni* Blake, *L. albiterminata* Blake, and *L. jamaicensis* Blake have the upper surface entirely dark

metallic blue or green without any pale yellow coloring. The present species is a little smaller than most of these other ones.

***Diabrotica marcanoi*, n. sp.**

(Fig. 12)

About 7.3 mm in length, elongate oblong oval, shiny, very finely and shallowly punctate, head, undersurface, except prosternum, tibiae and tarsi piceous black, antennae with three basal and three terminal joints pale, rest black; pronotum pale yellow brown with wide median dark vitta and a small dark spot on either side; elytra pale with wide dark humeral and wide dark scutellar area; two other large dark areas below and a smaller dark area near apex common to both elytra; femora pale.

Head with interocular space not quite half as wide as head, occiput and front shining, impunctate, piceous, with a small median depression over frontal tubercles, interantennal area slightly produced and this median projection extending down front, eyes large. Antennae not reaching middle of elytra, slender, 2nd joint very short, 3rd at least three times as long, 4th subequal to 3rd, 5th longer, remainder a little shorter and subequal, basal three joints pale yellow brown, terminal three joints reddish brown, rest black. Prothorax not much wider than long with slightly curved sides, not very convex and without depressions, shiny, yellowish brown with a broad piceous median area not quite reaching base and a small lateral spot on each side, surface finely punctate. Scutellum dark. Elytra wider than prothorax and not quite five times as long, wider in apical half; a slight costate elevation from humerus down side, very finely punctate; pale yellow brown with broad interrupted piceous black bands, one across at base, one above and one below middle, and a small one at apex. Body beneath with breast and abdomen piceous, femora yellow, tibiae and tarsi dark, claws with long tooth. Length 7.3 mm; width 3.4 mm.

Type.—Female, U.S.N.M. Type No. 70969.

Type locality.—Los Pablonos, Jarabacoa, Dominican Republic, Aug. 9, 1964, E. Marcano.

This species is of the same size and shape as *Diabrotica pulchella* Jacq. du Val of Cuba. The pattern of dark markings on the elytra is the same as that of *Diabrotica hispaniolae* Blake, but *hispaniolae* is a smaller beetle and there are no pronotal dark spots on either *pulchella* or *hispaniolae*. In fact, this dark pronotal marking seems to be unusual in species of *Diabrotica*. I take pleasure in naming it after Professor Eugenio de Jesus Marcano of the University of Santo Domingo, who is an all-around naturalist and a superb collector.

***Oedionychus punctipennis*, n. sp.**

(Fig. 6)

Approximately 5 mm in length, ovate, shining, pronotum finely and elytra more coarsely punctate, head, undersurface (except prosternum) and legs and wide vitta on elytra at suture and side piceous black; prothorax, narrow median vitta and narrow margin of elytra pale yellow brown.

Head with interocular space half width of head, occiput polished with a median depressed line running down front to tubercles and one or two punctures on each side near eye, tubercles distinctly marked, a short interantennal swelling and wide labrum. Antennae short, not extending far below humeri, 3rd joint longer than 4th or succeeding ones which are subequal, piceous with apical joints deep reddish brown. Prothorax more than twice as wide as long at base, narrowed anteriorly with explanate sides projecting near eyes and with small nodule; disc only a little convex with a slight linear depression near base, surface shining pale yellow brown and very finely punctate. Scutellum dark. Elytra wider than prothorax with wide, pale, explanate margin, a wide piceous sutural vitta common to both elytra, and on each elytron a wide lateral vitta joining with a narrow dark band at apex the wide sutural vitta, leaving only a very narrow pale yellow vitta between; surface shining and more distinctly and more coarsely punctate than pronotum. Body beneath lightly pubescent and except for pale prosternum and pale epipleura shining piceous black. Length 5.1 mm; width 3.1 mm.

Type.—Male, U.S.N.M. Type No. 70971.

Type locality.—St. Vincent, West Indies, Mt. St. Andrew, N. L. H. Krauss, 12 Oct. 1947.

The dark vittae in this species are wider than in *Oedionychus quadrilineatus* Harold from Mexico, and united narrowly at the apex. The elytral color pattern is similar to *Oedionychus amplivittatus* Blake but the beetle is smaller and with more distinctly punctate elytra and the prothorax lacks the dark spots of *amplivittatus*.

***Oedionychus viridipennis*, n. sp.**

(Fig. 11)

Approximately 6 mm in length, ovate, lustrous, very finely punctate, head, antennae, prothorax, undersurface and legs yellowish or reddish brown, elytra dark green with rosy lights.

Head with interocular space more than half width of head, eyes small, occiput polished, minutely punctate, a median line down front, tubercles well defined, lower front short and like a shelf over labrum. Antennae extending a little beyond humeri, 3rd joint long, remainder subequal. Prothorax more than twice as broad as long with explanate sides narrowed anteriorly and with small tooth at apical angle, paler yellow brown than the reddish brown head, shining, very indistinctly punctate. Scutellum dark. Elytra broad, convex, wider in apical half with prominent humeri and short intrahumeral depression; lustrous dark green with rosy lights, indistinctly and very finely punctate. Body beneath pale yellow brown with abdomen deeper reddish brown. Femora paler yellow brown than tibiae and tarsi which are rufous. Length 6 mm; width 3.5 mm.

Type.—U.S.N.M. Type No. 70972.

Type locality.—Aceitillar, Perdenales, Dominican Republic, March 22, 1967, E. Marcano.

There are not many species of *Oedionychus* from the West Indies, and instead of green the color of the elytra is usually blue. This species

has the same elytral coloration as *Disonycha laevigata* Jacoby, a species occurring in the West Indies which differs in having black antennae and dark tarsi. *Oedionychus dugesi* Jacoby from Mexico has green or blue elytra but has a spotted pronotum.

***Xenochalepus cyanura*, n. sp.**

(Fig. 15)

About 7 mm in length, elongate, parallel-sided, bright reddish brown with black antennae, black legs except near base of femora, and dark bluish purple apical third of elytra; prothorax with a depression in middle of base over scutellum, coarsely and contingently punctate, elytra with two costate ridges between suture and humerus, and a narrower ridge nearer humerus, $10\frac{1}{2}$ rows of punctures on each elytron.

Head deep reddish brown with piceous black quadrangular area between eyes and below antennal sockets somewhat protruding and roughly punctate, labrum dark and projecting at right angles from this, on vertex a longitudinal groove. Antennae filiform, black, joints 1 and 2 somewhat globular, 3rd joint longest, joints 7 to 11 wider. Prothorax not twice as wide as long with arcuate sides narrowing anteriorly, slightly convex, depressed in middle of base over scutellum, surface except along basal and anterior margins very coarsely and contingently punctate, entirely reddish brown. Scutellum reddish brown, alutaceous. Elytra nearly 5 times as long as prothorax with parallel sides, basal margin sinuate and on each side of scutellum rounded upwards over base of prothorax, one wide costa near suture, a second not so wide from within humerus and a third not reaching apex near margin, $10\frac{1}{2}$ rows of deep, coarse, contingent punctures between these separating ridges; lateral edges finely serrate in anterior half, becoming more prominently spiny in apical third; in color bright reddish brown with apical third deep violet blue; apex not emarginate at sutural angle. Body beneath deep reddish brown with trochanters black and legs except reddish brown base of femora, black. Front tibiae with a triangular tooth a little before apex. Length 7 mm; width 2.6 mm.

Type.—U.S.N.M. Type No. 70973.

Type locality.—Corail, Haiti, Sept. 10, 1925, W. A. Hoffman.

The apical third of the elytra was originally deep purplish blue in color, but this coloration was changed to piceous when the specimen was put in boiling water to relax. The beetle was in coloring similar to two other hispids from the West Indies,—*Octhispa pulchella* Sufrian from Cuba and *Agathispa dimidiata* (Olivier) from the Dominican Republic. *Octhispa pulchella*, in fact, although slightly smaller has a similar color pattern, the coloring being bright reddish brown and deep blue, but the elytra lack the costate ridging of *X. cyanura*.

***Hemisphaerota bimaculata*, n. sp.**

(Fig. 10)

From 4.3 to 4.8 mm in length, nearly round, convex, deep dark blue, on each elytron, not touching base or suture a large round bright reddish spot. Antennae

and pubescence on under side of tarsal joints pale yellow; whole upper surface very densely and on elytra coarsely and striately punctate.

Head with rounded occiput, a cluster of punctures near eye, eyes large, separated by antennal sockets, below each of which is a small rounded prominence, mouth directly below with labrum, often pale, at an angle from plane of front. Antennae pale yellow brown. Prothorax with sides curving forward on each side beyond eye and basal margin dipping sinuously down above scutellum, a little convexity in middle, densely punctate over whole upper surface, more coarsely on sides. Scutellum squarish and with few punctures. Elytra with sides projecting forward, not flattened or explanate and smoothly, strongly convex, without much sign of humeral elevation, surface throughout very densely, deeply and coarsely punctate, lustrous deep blue with a large roundish red spot on each elytron not touching either suture or base, but extending to humeral prominences and a little down the side and not to middle of elytron, large, deep, mostly striate punctures almost contiguous over entire surface of elytra. Body beneath deep brown with legs piceous and thick long pubescence on tarsal joints pale yellowish brown. Length 4.3–4.8 mm; width 3.5–3.8 mm.

Type.—U.S.N.M. Type No. 70974, and 3 paratypes.

Type locality.—Baragua, Cuba, collected by L. C. Scaramuzza, Oct. 13, 1928.

This species is distinct from *Hemisphaerota gundlachi* Boheman and *H. fallax* Suffrian both from Cuba, in that the basal spot on each elytron is situated nearer the humeral prominence and a little down the side, and does not touch either the base or the scutellum and extends farther down the elytron. In addition, the elytral punctation is denser. In his description of *gundlachi* Boheman states that the abdomen is flavo-testaceous, which is not true of *bimaculata* in which the abdomen is piceous. The four specimens examined appear rounder and less ovate and more like *H. xanthocera* Boheman which has an all dark coloring without spots.

Hemisphaerota quadrimaculata, n. sp.

(Fig. 8)

From 7 to 8.2 mm in length, broadly ovate, convex, with an explanate margin, the anterior rounded explanate margin of prothorax extending forward beyond eyes and distinctly punctate; disc moderately convex with finer scattered punctures along basal and anterior margins; elytra with regular, well-spaced, coarse, striate punctures; deep violaceous blue (one specimen almost black) on elytra four large bright reddish spots covering most of disc and coalescing at suture and narrowly at middle; humeri, middle, and apex of disc deep blue, antennae yellow, tarsal joints with bright yellow pubescence.

Head dark blue, impunctate over occiput, a median line down front, eyes large, two small swollen humps under antennal bases, a small labrum below projecting at right angles, mouthparts directly below and on the same plane as front. Antennae short, filiform, with two basal and end joint longest, all except the dark basal joint pale yellow. Prothorax with lateral explanate margin protruding forward in

a rounded area slightly beyond eyes and with a group of rather coarse punctures along margin, disc moderately convex, depressed over scutellum and with finer punctures along the very sinuate basal margin and anteriorly, deep violaceous blue. Scutellum dark, shining. Elytra about four times as long as prothorax, strongly convex with explanatemargin extending forward along sides of prothorax, coarse, quite regular, deep, striate punctures somewhat larger in middle of elytra and smaller along sides and at apex, margin also with rows of punctures, punctures not so close as in *Hemisphaerota erythrocer*a Germ.; explanate margin, humeri and disc dark, a dark area in middle almost connecting with a median lateral dark area extending up side of disc, area between scutellum and explanate margin in basal portion bright reddish and another reddish area below median dark spot not extending quite to margin or apex, these bright reddish areas coalescing at middle and suture. Body beneath entirely dark except for the conspicuous bright yellow pubescence on the tarsal joints. Length 7-8.2 mm; width 6-6.3 mm.

Type.—Male and one female paratype, U.S.N.M. Type No. 70975.

Type locality.—Santiago de las Vegas, Cuba, Agricultural Station, July 21, 1920, S. C. Bruner.

This is one of the group of blue beetles of which *Hemisphaerota erythrocer*a Germ. is the type. *H. gundlachi* Boheman and *H. fallax* Suffrian are also from Cuba but differ from this species in having only two spots near the base. In addition the elytral punctation is denser in *gundlachi*, and according to Suffrian the shape of the elytra is more sharply narrowed toward the apex in *fallax* than in *gundlachi*, which is similar in shape to the present species.

***Cyrtanota cyanea insulae*, n. subsp.**

(Fig. 14)

Approximately 12.5 mm long and 9.5 mm wide, ovate, dark blue, not very shiny, prothorax rather flat, dull and finely alutaceous, with very fine, nearly imperceptible, punctation, elytra convex, densely reticulate even to margin, within each reticulation small punctures.

Head almost concealed under overlying edge of prothorax, occiput smooth, an interantennal cleft and area below densely and coarsely punctate, labrum and mouthparts black. Antennae with five basal joints glabrous and brownish with a bluish or purplish lustre, basal joint thick and round, 2nd joint small, joints 3, 4, and 5 slender and long, remainder wider, not shiny and with fine brown pubescence. Prothorax more than twice as broad as long, nearly flat, with a slight median convexity and a depressed line down it; surface finely alutaceous, smooth, deep blue, sides rounded, basal margin sinuate. Scutellum black. Elytra widening out below prothorax with wide explanate margin continuing downward except at apex and not at right angles with convexity of elytra; surface with close reticulate ridging irregular in shape, the centres being filled with punctures, these ridges, while not so high, still visible to lateral margin; humeri alone bare. Body beneath shining deep blue with fine light brown pubescence at end of tibiae and beneath tarsal joints.

Type.—Female, U.S.N.M. Type No. 70976.

Type locality.—St. Thomas Island, West Indies.

Cyrtanota cyanea (L.) is from Brazil and up to now only one species of the genus, (*tristigma* Boh. from Central America and Mexico) has been found north of South America. The single specimen collected on St. Thomas island is similar to the Brazilian specimens of *cyanea* in the U.S.N.M. collection in size, shape and coloring. The main difference is in the reticulations on the elytra. These are much smaller and more numerous than on the Brazilian specimens, and moreover, although reduced, are plainly distinct to the margin, which is not the case in the Brazilian specimens. The punctation on the pronotum in the Brazilian specimens although fine is more apparent than on the pronotum of the West Indian specimen.

***Paratrikona rubescens* Blake**

(Fig. 16)

Paratrikona rubescens Blake, 1939, Proc. Ent. Soc. Wash. 41(8):238.

I described this species from two specimens that were collected by P. J. Darlington, Jr., who wrote that in life they were "rather deep red with conspicuous white blotches irregularly arranged. . ." On the dried specimens, however, only a slight trace of white marking remained, so that in my illustration the beetle appears entirely dark. Thirty years later several specimens have come to my attention from the collection of Dr. Eugenio de Jesus Marcano, of the University of Santo Domingo, Dominican Republic. These were collected in Arroya de Toro, Quebrada Honda, Dominican Republic. Darlington collected his specimens in Jarabacoa in a deep forest at 1400–4000 ft. elevation. These recent specimens show the white markings clearly and because my early illustration is misleading in that I gave no indication of the white blotches, I have made another figure to correct it.

KEY TO AMERICAN SPECIES OF THE GENUS MEZIRA

(HEMIPTERA: ARADIDAE)

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ABSTRACT—The key separates all but two species, *horvathi* (Bergroth) and *novella* Blatchley, of the 89 species and two varieties from the Americas assigned to the genus *Mezira*.

During the last few years the number of American members of the genus *Mezira* Amyot and Serville has increased by 26 species and two